

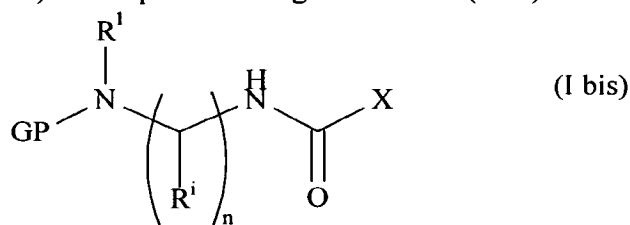
AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-53. (canceled)

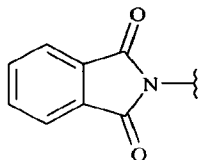
54. (currently amended) A compound having the formula (I bis)



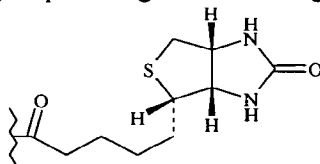
wherein

- "n" is ~~a whole number comprised from 1 to 50~~ 1 or 2,
- "i" is a whole number varying from 2 to n+1,
- GP is selected from the group consisting of:
 - ~~* a protective group selected from:~~
 - . an oxycarbonyl group ROCO, R representing an alkyl group of 1 to 20 carbon atoms, unsubstituted or substituted with an aryl group whose cyclic structure contains 5 to 20 carbon atoms, said alkyl group being saturated or not,
 - . an acyl group RCO, R being chosen from: an alkyl group of 1 to 20 carbon atoms or an aryl group whose cyclic structure contains 5 to 20 carbon atoms, said alkyl group being possibly substituted with an aryl group whose cyclic structure contains 5 to 20 carbon atoms, said alkyl group being saturated or not,
 - ~~— an alkyl group,~~
 - ~~— an aryl group,~~
 - ~~— a group of formula CONHR, R being such as defined above,~~

~~a phthalimido group (with $R^+ = \emptyset$) GP along with R^1 and the N then are bonded to form a phthalimido group of formula:~~



a biotinyle group having the following formula



~~O_2 (with $R^+ = \emptyset$),~~

— groups R^1 and R^i can each represent independently from each other: a hydrogen, a halogen, the protected or unprotected side chain of an amino acid selected from natural and synthetic amino acids, a (C_1-C_{20}) alkyl group, unsubstituted or substituted, an aryl group whose cyclic structure contains 5 to 20 carbon atoms, a group OR_a , $-NH_2$, $-OH$, $-COOR_a$, $-CONHR_a$, $-CONH_2$, $-CH_2COOR_a$, $-CH_2CONHR_a$, $-CH_2CONH_2$,

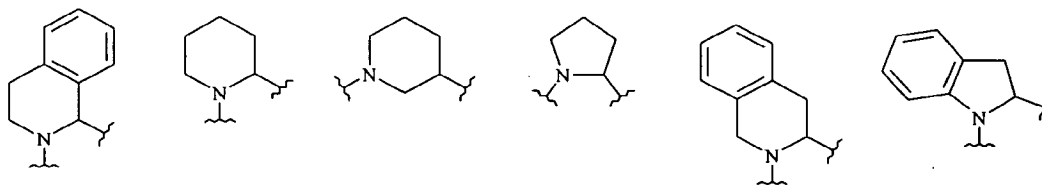
R_a representing an alkyl group, saturated or not, having 1 to 20 carbon atoms, an aralkyl group having 1 to 20 carbon atoms, or an aryl group whose cyclic structure contains 5 to 20 carbon atoms,

~~R^+ and R^i groups can also form a cycle on the basis of intramolecular cyclisations which are as follows:~~

~~1/ cyclization between R^+ and R^{i+kc} , where kc is a whole positive number,~~

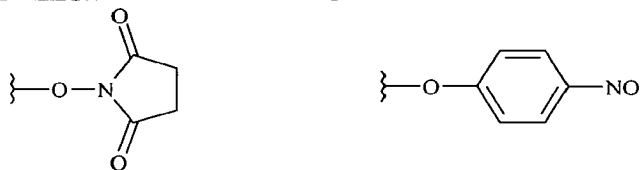
~~2/ cyclization between R^+ and R^i with preferably $i = 2, 3$ or 4 ,~~

— ~~wherein R^1 and R^i groups can also form a cycle with N, said cycle being selected from the group consisting of~~



— X group represents a ~~group conferring on the compound of formula (I bis) a structure of an activated derivative of carbamic acid, wherein said X group is derived from a compound selected from phenols, optionally substituted with at least one nitro or at least one halogen, or from hydroxylamine derivatives, imidazole and tetrazole, derived from N-hydroxysuccinimide or p-nitrophenol,~~

said X group having one of the following formula:



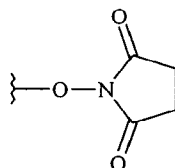
wherein said compound is not one of the following compounds selected from the group consisting of:

- $n=2$, GP=Boc, R^1 =isobutyl, $R^2=R^3$ =H, X=4-nitrophenol;
- $n=2$, GP=Boc, R^1 =benzyl, $R^2=R^3$ =H, X=4-nitrophenol;
- $n=2$, GP=Boc, R^1 =CH₂-p-C₆H₄O*t*-Bu, $R^2=R^3$ =H, X=4-nitrophenol;
- $n=2$, GP=Boc, R^1 =H, $R^2=R^3$ =H, X=4-nitrophenol.

55. (previously presented) The compound according to claim 54, wherein GP represents an oxycarbonyl group chosen from Boc, Fmoc, benzyloxycarbonyl or allyloxycarbonyl.

56-59. (canceled)

60.(currently amended) The compound according to claim 54, in which X is ~~derived from~~ a N-hydroxysuccinimide group and has the following formula:

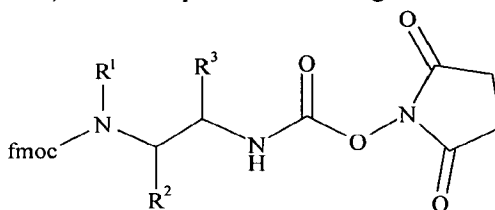


61. (previously presented) The compound according to claim 54, wherein the alkyl group corresponding to R^1 or R^i is substituted with one or several substituents selected from the group consisting of $-\text{COOR}_h$, $-\text{CONHR}_h$, $-\text{COOH}$, $-\text{OH}$, $-\text{OR}_h$, $-\text{NHR}_h$, $-\text{NH}_2$, $-\text{NH}(\text{CO})\text{R}_h$, an aryl group whose cyclic structure contains 5 to 20 carbon atoms, halogen, carbonyl, nitrile, and guanidino,

R_h representing an alkyl group, saturated or not, having 1 to 20 carbon atoms, an aralkyl group having 1 to 20 carbon atoms, or an aryl group whose cyclic structure contains 5 to 20 carbon atoms.

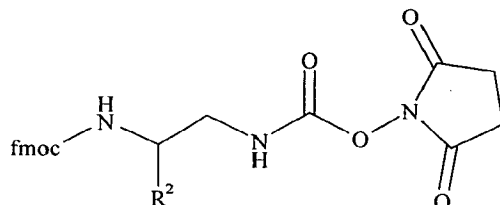
62-63. (canceled)

64. (currently amended) The compound according to claim 54, having the following formula



wherein R^2 represents a (C_1 - C_{20}) alkyl group, optionally substituted with a phenyl group, and wherein said phenyl group is optionally substituted with an alkoxy group.

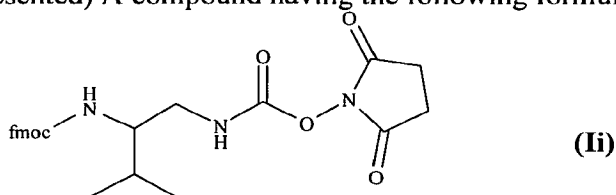
65. (currently amended) The compound according to claim 54, having the following formula:



wherein R² represents a (C₁-C₂₀) alkyl group, optionally substituted with a phenyl group, and wherein said phenyl group is optionally substituted with an alkoxy group.

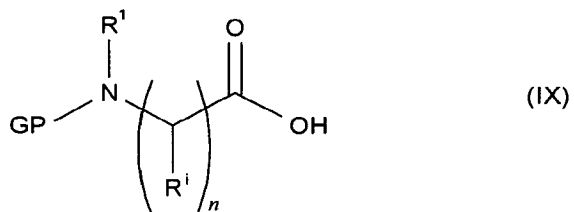
66. (canceled)

67. (previously presented) A compound having the following formula:

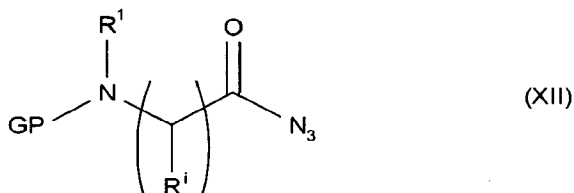


68. (previously presented) A process for preparing a compound according to claim 54, comprising:

providing a compound of formula (IX)



transforming said compound (IX) into a corresponding acyl azide (XII)



transforming said acyl azide (XII) by Curtius rearrangement into a corresponding isocyanate (II),

treating said isocyanate (II) under conditions that provide a carbamic acid compound of formula (I bis).

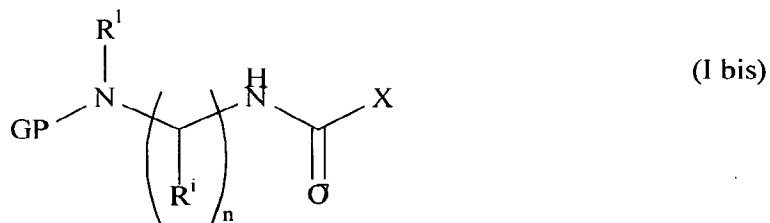
69. (currently amended) The process according to claim 68, wherein transforming said compound (IX) into a corresponding acyl azide (XII) is carried out by treatment of a mixed anhydride, formed by the reaction of acid compound (IX) with ethyl or isobutyl chloroformate in the presence of a tertiary amine, wherein said tertiary amine is NMM (N-methylmorpholine), DIEA (di-isopropylethylamine), or Et₃N in THF (tetrahydrofuran) with a sodium azide solution,

wherein said step of transforming acyl azide (XII) into a corresponding isocyanate (II), is carried out by heating a solution of acyl azide in a solvent, and

wherein a compound selected from the group consisting of N-hydroxysuccinimide, phenol, pentafluorophenol, pentachlorophenol or p-nitrophenol, 2,4-dinitrophenol, 2,4,5-trichlorophenol, 2,4-dichloro-6-nitrophenol, hydroxy-1,2,3-benzotriazole, imidazole, tetrazole, 1-oxo-2-hydroxydihydrobenzo-triazine (HODhbt), 7-aza-1-hydroxybenzotriazole (HOAt) and 4-aza-1-hydroxybenzo-triazole (4-HOAt), is the compound treating isocyanate (II) to obtain a carbamic acid derivative of formula (I bis).

70-72. (canceled)

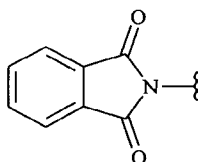
73. (new) A compound having the formula (I bis)



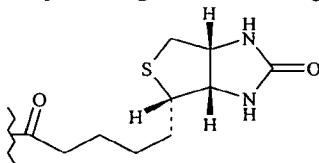
wherein

- "n" is 1 or 2,
- "i" is a whole number varying from 2 to n+1,
- GP is selected from the group consisting of:
 - an oxycarbonyl group ROCO, R representing an alkyl group of 1 to 20 carbon atoms, unsubstituted or substituted with an aryl group whose cyclic structure contains 5 to 20 carbon atoms, said alkyl group being saturated or not,
 - an acyl group RCO, R being chosen from: an alkyl group of 1 to 20 carbon atoms or an aryl group whose cyclic structure contains 5 to 20 carbon atoms, said alkyl group being possibly substituted with an aryl group whose cyclic structure contains 5 to 20 carbon atoms, said alkyl group being saturated or not,

GP along with R¹ and the N then are bonded to form a phthalimido group of formula:



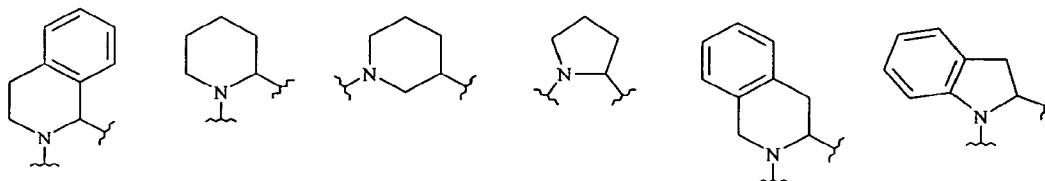
- a biotinyle group having the following formula



- groups R¹ and Rⁱ can each represent independently from each other: a hydrogen, a halogen, the protected or unprotected side chain of an amino acid selected from natural and synthetic amino acids, a (C₁-C₂₀) alkyl group, unsubstituted or substituted, an aryl group whose cyclic structure contains 5 to 20 carbon atoms, a group OR_a, -NH₂, -OH, -COOR_a, -CONHR_a, -CONH₂, -CH₂COOR_a, -CH₂CONHR_a, -CH₂CONH₂,

R_a representing an alkyl group, saturated or not, having 1 to 20 carbon atoms, an aralkyl group having 1 to 20 carbon atoms, or an aryl group whose cyclic structure contains 5 to 20 carbon atoms,

— wherein R^1 and R^i groups can also form a cycle with N, said cycle being selected from the group consisting of



— X group represents O-succinimidyl or p-nitrophenol, wherein said compound is not one of the following compounds selected from the group consisting of:

- $n=2$, GP=Boc, R^1 =isobutyl, $R^2=R^3$ =H, X=4-nitrophenol;
- $n=2$, GP=Boc, R^1 =benzyl, $R^2=R^3$ =H, X=4-nitrophenol;
- $n=2$, GP=Boc, R^1 =CH₂-p-C₆H₄O_t-Bu, $R^2=R^3$ =H, X=4-nitrophenol;
- $n=2$, GP=Boc, R^1 =H, $R^2=R^3$ =H, X=4-nitrophenol.

74. (new) The compound according to claim 73, wherein GP represents an oxycarbonyl group chosen from Boc, Fmoc, benzyloxycarbonyl or allyloxycarbonyl.

75. (new) The compound according to claim 73, wherein X is a O-succinimidyl.

76. (new) The compound according to claim 73, wherein the alkyl group corresponding to R^1 or R^i is substituted with one or several substituents selected from the group consisting of -COOR_n, -CONHR_n, -COOH, -OH, -OR_n, -NHR_n, -NH₂,

-NH(CO)R_h, an aryl group whose cyclic structure contains 5 to 20 carbon atoms, halogen, carbonyl, nitrile, and guanidino,

R_h representing an alkyl group, saturated or not, having 1 to 20 carbon atoms, an aralkyl group having 1 to 20 carbon atoms, or an aryl group whose cyclic structure contains 5 to 20 carbon atoms.